

S/123/62/000/015/011/013
A052/A101

AUTHORS: Zolotukhin, N. M., Kuz'mintsev, V. N.

TITLE: On the drop of deformation resistance of metal when forging large ingots

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 15, 1962, 3, abstract 15V13 (In collection: "Konstruir. i tekhnol. mashinostr.". Moscow-Kiyev, Mashgiz, no. 1, 1961, 203 - 207)

TEXT: When forging blanks out of large ingots, a drop of the deformation resistance takes place as the degree of deformation increases. So when sinking a 125 t 40H (40N) steel blank the deformation resistance decreases in the process of sinking from 2.52 kg/mm² at the first pressing to 1.28 kg/mm² at the last one. The deformation resistance of a metal is affected by the temperature, degree and rate of deformation. When forging large blanks the inner temperature practically does not change. The conversion of a part of mechanical energy into thermal energy of the forging contributes to this phenomenon. For this reason the main bulk of metal, with the exception of surface layers, has a constant

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Card 1/2

On the drop of deformation resistance of...

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temperature. As in the process of forging the degree of deformation increases the deformation resistance can decrease due to the crushing of the cast dendrite structure; this crushing facilitates the softening processes. An increase of external friction forces with the increase of the degree of deformation has an insignificant effect on large forgings, since because of their large dimensions the relation of the contact surface to the volume is rather low as compared with small blanks. The rate of deformation when sinking heavy ingots decreases considerably in the course of one pressing and also from pressing to pressing, particularly when the press is working at the limit of its capacity which is the case at last pressings. At the same time the rate of deformation drops from its maximum value to zero. Such a sharp decrease of the rate results in a considerable decrease of the deformation resistance of the metal of the blank. A very considerable decrease of the deformation resistance at the end of a pressing, when the speed of the crosshead approaches zero, takes place also as a result of the strain relaxation, that is of the transition of a part of elastic deformation into plastic one; because of this transition, the forging receives some deformation at a considerably lower deformation resistance. There are 2 references and 2 graphs. ✓

V. Pavlyuchenko

[Abstracter's note: Complete translation]

Card 2/2

ACC NR: AP6035884

SOURCE CODE: UR/0413/66/000/020/0124/0124

INVENTOR: Badayeva, A. A.; Pervaya, A. S.; Tutov, I. Ye.; Katsnel'son, V. Yu.;
Kuz'mintsev, V. N.; Koloskov, M. M.; Kulinich, V. P.

ORG: none

TITLE: High speed steel. Class 40, No. 187314 [announced by the Central Scientific Research Institute of Technology and Machine Building (Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya); All-Union Scientific Research Tool Institute (Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 124

TOPIC TAGS: high speed steel, chromium tungsten molybdenum steel, vanadium containing steel, titanium containing steel, *DUCTILITY*, *TOUGHNESS*

ABSTRACT: This Author Certificate introduces a high-speed steel containing silicon, manganese, chromium, tungsten, molybdenum, vanadium and titanium. To improve the strength, ductility, notch toughness, and oxidation and heat resistance and to reduce carbide heterogeneity, the steel composition is set as follows: 0.75—0.85% carbon, 0.17—0.35% silicon, 0.20—0.40% manganese, 3.5—4.5% chromium, 2.5—3.0% tungsten, 2.5—3.0% molybdenum, 1.9—2.2% vanadium, 0.03—0.08% titanium.

SUB CODE: 11/ SUBM DATE: 05Jun65/
Card 1/1

UDC: 669.14.018.252.3

PROSKURNIN, M.A.; SHARPATYY, V.A.; SMIRNOVA, V.I.; POMERANTSEV, N.M.;
KUZ'MINTSEVA, G.N.; SIMONOVA, T.A.

Conversion of the oxidative component of radiolysis in the nitrate -
water system. Dokl. AN SSSR 139 no.2:410-413 J1 '61. (MIRA 14:7)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova. Predstavleno
akademikom A.N. Frumkinym.
(Sodium nitrate) (Radiation)

KUZ'MINYKH, A.A.

Influence of leucocytic suspensions on the healing of wounds in
animals. Trudy Inst. morf. shiv. no.26:173-183 '59 (MIRA 13:3)
(Leucocytes) (Veterinary medicine)

KUZ'MINYKH, A.A.

Influence of the formed elements of the blood on the healing of
skin wounds in cattle. Trudy Inst. morf. zhiv. no.26:184-206 '59
(Leucocytes) (Veterinary medicine) (MIRA 13:3)

KUZ'MINYKH, A.A.

The characteristics of the IR-1 relay should be changed.
Avtom., telem. i sviaz' 7 no.6:39-40 Je '63.

(MIRA 17:3)

1. Starshiy inzh. kontrol'no-izmeritel'nogo punkta Chitinskoy
distantsei signalizatsii i svyazi Zabaykal'skoy dorogi.

BELYANCHIKOV, V.N., inzh.; NOVIKOV, I.V., inzh.; ZAYTSEV, I.Ye.,
inzh.; AKIL'YEV, S.A., inzh.; BELKIN, V A., inzh.;
POCHKINA, L.A., inzh.; VASIL'YEV, O.A., inzh.; Prinsipali
uchastiye: KOPEYKINA, O.P.; SMIRNOVA, A.N.; BELKINA, S.S.;
SHILINA, Ye.I.; LAGUNOV, Ye.N.; REZNIK, S.Z.; BRISMAN,
B.I.; KUZ'MINYKH, A.A.; ~~red. zad. ya~~; SHIBKOVA, R.Ye.,
~~tekhn. red.~~

[Operational life of parts of excavating, construction,
and road machinery; a reference catalog] Sroki sluzhby de-
talei ekskavatorov, stroitel'nykh i dorozhnykh mashin,
katalog spravochnik. Izd.2., perer. i dop. Moskva, Gos-
lesbumizdat. Pt.2. [Road, construction machinery, and
machinery for manufacturing building materials] Dorozhnye,
stroitel'nye mashiny i mashiny dlia proizvodstva stroitel'-
nykh materialov. 1963. 306 p. (MIRA 17:4)

1. "Stroitiyazhmashzapchast'," Tekhnicheskaya kontora. Kon-
struktorskoye byuro.

KUZ'MINYKH, A.D., inzh.

Results of studying the operation of the BSSh-1 rig. Izv. vys.
ucheb. zav.; gor. zhur. 5 no.10:102-104 '62. (MIRA 15:11)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendovana
kafedroy ekonomiki i organizatsii gornoy promyshlennosti.
(Boring machinery--Testing)

KUZ'MINYKH, A.P.

Determining femoral abduction in osteotomy designed to lengthen the extremity by tilting the pelvis. Ortop. travm. protez., Moskva 19 no.6:88-89 H-D '58. (MIRA 12:1)

1. Iz Irkutskogo nauchno-issledovatel'skogo instituta ortopedii i vosstanovitel'noy khirurgii (dir. - prof. Z.V. Bazilevskaya). (FEMUR)

KUZ'MINYES', A.P., referent.

Minutes of a meeting of the Irkutsk Society of Traumatologists and
Orthopedists. Ortop. travm. protez., Moskva 19 no.6:97-98 N-D '58.
(ORTHOPEDIA) (MIRA 2:1)

(SOV/132-59-7-13/17

AUTHOR: Kuz'minykh, A.Ya.

TITLE: A Locking Transition Piece

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 7, p 55 (USSR)

ABSTRACT: This is a description of a locking transition piece widely used in drilling operations at the Artemovskiy Mine of the Krasnoyarsk Sovnarkhoz. It is used instead of a usual transition piece, because, in case of a breakdown during drilling, especially if the drilling device is blocked below the surface, the causes of the breakdown can be speedily liquidated. The locking transition piece is composed of two parts, the plug and its socket connected together by 1 inch long thread. The plug is screwed into the drilling pipe. When need arises, a simple turn to the left separates other pipes from the drilling pipe, the plug is pulled out, and the socket is bored through with a special hard bit and

Card 1/2

A Locking Transition Piece

SOV/132-59-7-13/17

the drilling continues through the drilling pipe. There are 2 diagrams.

ASSOCIATION: Geologorazvedochnaya partiya Artemovskogo Rudnika
(Geological Prospecting Party of the Artemovskiy Mine)

Card 2/2

Kuz'minykh, E. I.

USSR/General Biology - General Histology.

B-3

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 183.

Author : E.I. Kuz'minykh

Inst :

Title : Processes of De- and Regeneration of the Peripheral Nerves in Experimental Stimulation and Depression of the Central Nervous System.

Orig Pub : Tr. Mosk. wet. akad., 1955, 9, 29-48.

Abst : Upon the administration of strychnine (subcutaneously once every three days on the basis of 0.08 milligrams per one kilogram of weight) to an animal after its sciatic nerve was cut, an arrest of the regenerative process exhibited in an intensification of the retrograde degeneration of the fibers of the central terminal, in the slowing down of the appearance and the growth through the zone of the cut of young regenerative fibers, and a prolonged delay in the dissociation of the

Card 1/2

USSR/General Biology - General Histology.

B-3

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 183.

fibers of the peripheral terminal was disclosed. The difference between the processes of regeneration in experimental and control animals disappeared 25 days after the operation. Analogous changes of the regenerative process in the sciatic nerve is caused also by urethan in combination with veronal (urethan 0.6 g + veronal 0.75 g per kg weight subcutaneously daily). In both series of experiments, there was either a delay (strychnine) or a complete absence (urethan and veronal) in the course of the entire period of observations (25 days) of a development of trophic ulcers which developed in the control animals within 12 to 14 days after the operation. In the neurons of the horns of the spinal cord and the spinal cord ganglia, the administration of the above mentioned drugs causes an intensification of retrograde degeneration and a more frequently occurring destruction of the neurons.

Card 2/2

L 02202-67 EWT(m)/EWP(j)/T IJP(c) DJ/RM

ACC NR: AP6030422

SOURCE CODE: UR/0193/66/000/007/0037/0637

AUTHOR: Zhelonkin, Ye. I. ; Kuz'minykh, I. F. ; Rautenberg, Yu. A.

ORG: none.

TITLE: A ¹⁷pump with ¹⁵rubber tubing for pumping aggressive fluids

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 7, 1966, 37

TOPIC TAGS: fluid pump, rubber tube pump

ABSTRACT: A cart-mounted pump for transferring aggressive liquids has been introduced in a galvanic plant [unidentified]. The pump, whose operation is based on lateral compression and decompression of an elastic rubber tube, has a capacity of 30 l/min and is driven by a 0.6-kw electric motor. The liquid is completely insulated from the metallic parts of the pump to ensure a long service life. The pump design is described in detail with a complete diagram. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: none/

Card 1/1

UDC: 621.65.037

KUZ'MINYKH, L. (Tashkent)

Organize repair workshops in the field. Stroi. truboprov. 7
no.7:31 J1 '62. (MIRA 15:7)

1. Glavnyy mekhanik stroitel'nogo uchastka No.4 tresta
Soyusprovedmekhanizatsiya.
(Construction equipment—Maintenance and repair)

KUZ'MINYKH, M.P.

Cholinesterase of the blood serum in liver diseases. Kaz.med.
zhur. 41 no.1:26-29 Ja-F '60. (MIRA 13:6)

1. Iz terapevticheskogo otdeleniya (zav. - prof. Z.I. Malkin)
Respublikanskoy klinicheskoy bol'nitsy Tatarskoy ASSR (glav-
vrach - Sh.V. Bikchurin).
(CHOLINESTERASE) (LIVER--DISEASES)

LOSEV H.I.; KUZ'MINYKH, S.B.

Taking an electrogram of nerve trunks using apparatuses with recording and quantitative evaluation of the activity of the nerve. Biul. eksp. biol. i med. 55 /i.e. 56/ no. 1:119-122 0'63 (MIRA 17:8)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. S.M. Pavlenko) i Moskovskogo ordena Lenina meditsinskogo Instituta imeni Sechenova. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Zakusovym.

OSIPOVA, V.I.; TIMOFEYEV, A.F.; KIGEL', S.L., inzh.; OSETROVA, K.I.;
SHCHEKOTOVA, O.D.; KUZ'MINYKH, T.F.; TOLSTYKH, A.K., telefonistka, udarnik
kommunisticheskogo truda

Long-distance through calls should be given a green light. Vest. svyazi
23 no.1:21-23 Ja '63. (MIRA 16:3)

1. Nachal'nik Kiyevskoy mezhdugorodnoy telefonnoy stantsii (for Osipova).
 2. Nachal'nik Tashkentskoy mezhdugorodnoy telefonnoy stantsii (for Timofeyev).
 3. Nachal'nik laboratorii ekonomiki svyazi TSentral'nogo nauchno-issledovatel'skogo instituta svyazi Ministerstva svyazi SSSR (for Srapionov).
 4. TSentral'nyy nauchno-issledovatel'skiy institut svyazi Ministerstva svyazi SSSR (for Yefimov).
 5. Proizvodstvennaya laboratoriya Kazanskoy mezhdugorodnoy telefonnoy stantsii (for Kigel').
 6. Starshiy inzh. Rizhskoy telegrafno-telefonnoy kontory (for Osetrova).
 7. Starshiy inzh. Tyumenskoy mezhdugorodnoy telefonnoy stantsii (for Shchekotova).
 8. Starshaya telefonistka Tyumenskoy mezhdugorodnoy telefonnoy stantsii (for Kuz'minykh).
 9. Tyumenskaya mezhdugorodnaya telefonnaya stantsiya (for Tolstykh).
- (Telephone)

KUZ'MINIKH, V.D.

Selecting source functions in plotting the model of a facula.
Soob. GAISH no.133:10-18 '64. (MIRA 17:8)

KUZ'MINYKH, V.D.

Relative photometry of the continuous spectrum of faculae. Astron.
tsir. no.219:21-23 Mr '61. (MIRA 14:10)

1. Petropavlovskiy pedagogicheskiy institut.
(Sun—Faculae—Spectra)

KUZ'MINYKH, V.D.

Investigating the facula-photosphere contrast in the spectral
region $\lambda\lambda 3755-6800 \text{ \AA}$. Astron. zhur. 39 no. 6: 965-972 N-D
'62. (MIRA 15:11)

1. Gosudarstvennyy astronomicheskiy institut im.
P.K. Shternberga.

(Sun—Faculae)

L 11138-63

ACCESSION NR: AP3001235

FMT(1)/FCC(w)/RDS/EEG-2/ES(v)---AFFTC/ESD-3---Pc-1/Pc-1---Gw
S/0033/63/040/003/0419/0426

AUTHOR: Kuz'minykh, V. D.

TITLE: On the variation of facula contrast with wavelength. Determination of the spectrophotometric temperatures of faculae

SOURCE: Astronomicheskii zhurnal, v. 40, no. 3, 1963, 419-426

TOPIC TAGS: solar activity, facula, facula contrast, spectrophotometry, spectrophotometric temperature, facula radiation, solar photosphere

ABSTRACT: This interpretation of spectrophotometric observational data is a continuation of the author's antecedent paper in Astron. zh., v. 39, 1962, 965. Graphs of the dependence of the facula contrast on the wavelength are adduced for distances from the center of the solar disk, $\sin \theta$, from 0.0 through 0.9 at 0.1 intervals and for 0.95 and 0.98. Initially, the curves rise in an almost parallel ascent from the center of the disk to $\sin \theta = \text{appx. } 0.5$, whereupon the ultraviolet (UV) portion of the facular radiation increases more steeply than that of the photosphere. At greater values of $\sin \theta$, along with the UV portion of the radiation, the emission in the visible portion of the spectrum, too, begins to increase up to the distance of maximal facula contrast, that is, to $\sin \theta \text{ appx.}$

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L 11138-63

ACCESSION NR: AP3001235

3

0.87. A reverse process prevails beyond that point to the edge of the disk, and the maxima of the curves are displaced. Contrary to antecedent investigations, the present analysis assume the center of the solar disk as an invariable reference source for the determination of the spectrophotometric gradients and temperatures. The values of the absolute spectrophotometric gradients and temperatures are given for the various values of $\sin \theta$. The mean facula-photosphere temperature difference is found to be 350-400K. The temperature maximum of faculae near $\theta = 50^\circ$, that is, near the point of maximal facula contrast, previously detected by O. A. Mel'nikov and S. S. Zhuravlev (Leningrad, Universitet. Vestnik, v. 13, 1956, 124) is confirmed. A new interpretation of this phenomenon, differing from that of Mel'nikov and Zhuravlev, is given. The author thanks G. F. Sitnik and N. I. Kzhevnikov for their constant attention to the present study. There are 2 figures and 1 table.

ASSOCIATION: Astronomicheskii in-t imeni P. K. Shternberga (Astronomical Institute)

SUBMITTED: 09Oct62

DATE ACQD: 01Jul63

ENCL: 02

SUB CODE: AS, PH

NO REF SOV: 016

OTHER: 016

Card 2/4

11138-63
ACCESSION NR: AP3001235

ENCLOSURE: 1

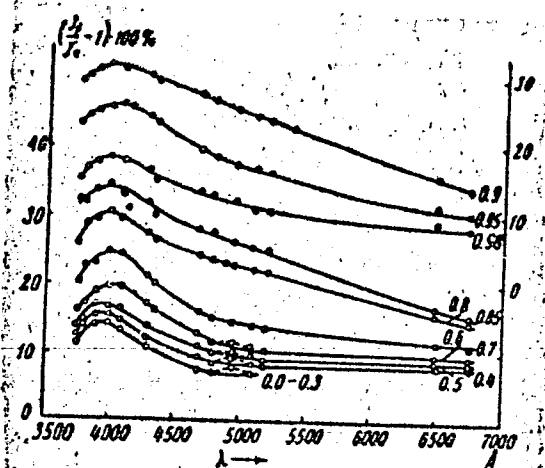


Fig. 1. Variation of the facula-photosphere contrast with wavelength. For the curves $\sin \theta = 0.90, 0.95$, and 0.98 the scale of the ordinates appears to the right. These curves are shifted upward y -wise, without any change in scale.

Card 3/4

L 11138-63
ACCESSION NR: AP3001235

ENCLOSURE: 1

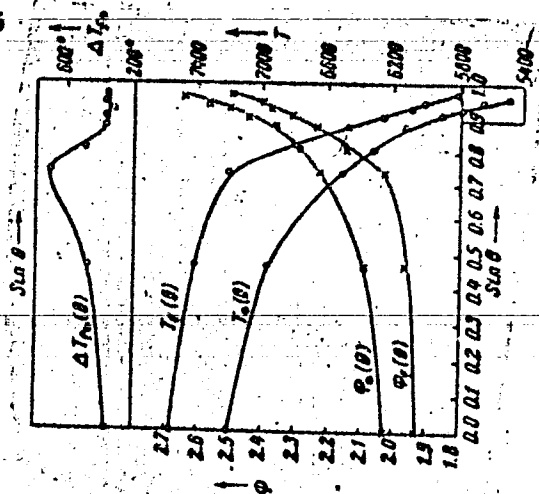


Fig. 2. Variation of the absolute gradients and spectrophotometric temperatures of faculae and the photosphere with $\sin \theta$. The upper portion of the curve shows the variation of the facula-minus-adjacent-photosphere temperature difference with $\sin \theta$. These results pertain to the wavelength interval from 4,000 to 5,000 angstrom.

Card ^{ja/Ck} 4/4

KUZ'MINYKH, V.D.; SITNIK, G.F.

Facula-photosphere contrast in the λ 6700-21000 Å region.
Astron. zhur. 40 no.5:954-956 S-O '63. (MIRA 16:11)

1. Gosudarstvennyy astronomicheskiy institut im. P.K. Shternberga.

ACCESSION NR: AP401447

S/0188/64/000/001/0071/0080

AUTHOR: Kozhevnikov, N. I.; Kuz'miny*kh, V. D.

TITLE: Temperature distribution in faculae

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fiz. astron., no. 1, 1964, 71-80

TOPIC TAGS: sun, solar physics, solar facula, facula, astronomy, facula temperature

ABSTRACT: Seven different ways in which the source function for a facula can be expressed are explored. It is shown that the behavior of the source function for a facula cannot be the same as the behavior of the source function for the photosphere. The source function for a facula should have a "knee" at a point corresponding to some value of the optical depth τ . On the basis of previously published observational data and using the proposed model of the source function, the authors compute the dependence of the temperature of the facula on optical depth for various wavelengths. It is demonstrated that deviations of the temperature of faculae from the temperature of the photosphere have a systematic variation with a change in wavelength. Orig. art. has: 5 figures, 3 tables and 19 formulas.

ASSOCIATION: GOSUDARSTVENNYY ASTRONOMICHESKIY INSTITUT IMENI SHTERNBERGA (State
Card. 1/21

ACCESSION NR: AP4033634

8/0188/64/000/002/0052/0055

AUTHOR: Kuz'miny*kh, V. D.; Kozhevnikov, N. I.

TITLE: The problem of the accuracy of determination of the source function of a plage

SOURCE: Moscow. Universitat. Vestnik. Seriya III. Fizika, astronomiya, no. 2, 1964, 52-55

TOPIC TAGS: astronomy, solar activity, solar plage, solar photosphere

ABSTRACT: A study has been made of the influence of errors in observations of the plage-photosphere contrast on the accuracy of determination of the source function of a plage. The observed discrepancies in the temperatures of plages cited by various authors can be attributed in part to observational errors. A method is proposed for correctly estimating the order of the value ξT . When determining models of a plage from observations of the plage-photosphere contrast in a number of wavelengths it is possible to have differences between models obtained for different λ , in part caused by inaccuracies of observation. At the same time, in photoelectric observations it is admissible and legitimate to have discrepancies in T in the "hot" region of a plage of the order of 30-50C

Card. 1/2

ACCESSION NR: AP4033634

and in the "cold" region of 70-120C. Orig. art. has: 3 formulas and 2 tables.

ASSOCIATION: Kafedra nebesnoy mekhaniki i gravimetrii, Moskovskiy universitet (Department of Celestial Mechanics and Gravimetry, Moscow University)

SUBMITTED: 27Apr63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: AA

NO REF SOV: 005

OTHER: 003

Card 2/2

KUZ'MINYKH, V.D.

Energy distribution in the continuous facula spectra. Soob.
GAISH no.131:24-36 '64. (MIRA 17:8)

KOZHEVNIKOV, N.I.; KUZ'MINYKH, V.D.

Structure of a facula. Astron.zhur. 41 no.2:323-331 Mr.-Ap '64.
(MIRA 17:4)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga.

KUZ'MINYKH, V.D.

Model of an average facula. Astron. zhur. 41 no. 4:692-696
Jl-Ag '64 (MIRA 17:8)

1. Gosudarstvennyy astronomicheskiy institut im. P.K. Shtern-
berga.

KUZ'MINYKH, V.I.: VINOGRADOVA-VOLZHINSKAYA, N.A.: POLYAK, B.L.

"Surgical Treatment and Healing of Large Penetrating Wounds of the Corneo-Scleral Area", Vest. Oftalmologii, No 1, Jan-Feb '50

Chair of Ophtalmalogy; Mil Med Acad im. Kirov.

POLYAK, B. L., VINOGRADOVA-VOLZHINSKAYA, N. A., KUZNETSOV, V. I.

Eye - Surgery

Exclusion of the iris in the healing of experimental
penetrating corneal wounds in various surgical methods.
Vest. oft. 31 No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

KUZ'MINYKH, V.P.

Study of some postoperative complications in relation to the type of constitution of the patient [with summary in English, p.159-160]. Vest.khir. 80 no.1:109-115 Ja '58. (MIRA 11:4)

1. Iz kliniki obshchey khirurgii No.2 (nach. - prof. M.S.Lisitsyn) Voenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova.

Adress avtora: Nikolayev, gosptal'.

(SURGERY, OPERATIVE, compl.

postop., relation to body type (Rus))

(BODY CONSTITUTION

body type, relation to postop. surg. compl. (Rus))

KUZ 'MINYKH, Ye., inzh.

Mechanizing the removing of large reinforced concrete products from
forms. Bul. tekhn. inform. 4 no.1:27 Ja '58. (MIRA 11:2)
(Reinforced concrete construction--Formwork)

KUZ'MINYKH, Ye., inzh.

Small-size tap winch. Biul. tekhn. inform. 4 no. 6:30 Je '58.

(MIRA 11:7)

(Boring machinery)

KUZ'MINYKH, Yu.K.; SHEVAKHIN, S.T.

Heat-treatment section of the automatic plant for the manufacture
of bearings. Stan.i instr. 27 no.5:10-14 My '56. (MLRA 9:8)
(Bearing industry) (Tempering) (Automation)

KUZ'MISHCHEV, Andrey Petrovich; GREBENNIKOVA, M.M., red.; SEVAST'YANOVA,
E.S., red.; VOROTILINA, L.I., tekhn. red.

[How to increase labor productivity in agriculture] Kak povysit' proizvoditel'nost' truda v sel'skom khoziaistve. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1960. 75 p. (MIRA 14:7)
(Agriculture--Labor productivity)

SEVYEL'Y, A. N., (Engineer), SAPPAGORIAN, G. G., KUPCHENKO, P. F.

Hydroelectric power stations

Measures against floating peat islands. Gidr. stroi. 21 no. 4 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

SAFRAZBEKYAN, G. S.; KUZ'NICHENOV, P. F.; Engg.

Hydroelectric Power Stations

Clogging of water pipes of hydroelectric power plants with deadwood and peat.
Gidr. stroi. 22, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, Jun. 1953. Uncl.

SHEVKELEV, B.N., inshener; KUZMISHCHEV, P.F., inshener; MIKHALEVICH, P.A.,
inshener.

Reinforcing the slopes of earth structures with concrete. Gidr.
stroi. 23 no.4:19-22 '54. (MLRA 7:7)
(Earthwork) (Concrete construction)

VYAZEMSKIY, O. V., KOZ'MISHCHEV, P. F., AND MIKHALEVICH, P. A.

Operation of an Alluvial Dam in Complex Hydrogeological Condition

The authors describe the hydrogeological conditions of an earth dam constructed in a region formerly covered by ice. The dam under discussion is limited in height to 17 meters. The authors discuss the filtration regime in the body and foundation of the dam during 11 years of use and describe the additional drainage measures which were necessitated by the appearance of springs. (RZhMekh, No. 6, 1955) Izv. Vses. n.-i. in-ta Gidrotekhn. Vol. 52, 1954, 145-170

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

Kuzmishchev, P.F.

AID P - 2121

Subject : USSR/Engineering

Card 1/1 Pub. 35 - 10/20

Authors : Yevko, A. V., Kuzmishchev, P. F. and Mikhalevich, P. A.

Title : On the durability of concrete-containing carbonaceous gravel

Periodical: Gidr. stroi., no.3, 27-29, 1955

Abstract : The article reports observations made on concrete placed 13 years ago which contains 20 to 30% of carbonaceous gravel. Tables with data of various limestone and dolomites are given. Some slight damages of the upstream submerged section are reported. However, the installation was found to be in a satisfactory condition. Due to weathering and climatic changes, dolomite particles were more affected by erosion than carbonaceous gravel. The latter's strength could be increased by augmenting the protective layer 1 to 2 cm.

Institution: None

Submitted : No date

AID P - 3204

Subject : USSR/Hydraulic Engineering

Card 1/1 Pub. 35 - 8/19

Authors : Sdobnikov, D. V., P. F. Kuz'mishchev, and P. A. Mikhalevich, Engs.

Title : Masonry work on slopes of earth installations

Periodical : Gidr. stroi., 5, 23-27, 1955

Abstract : The article reports on construction and present condition of the stone facing of canals, earth dams, and embankments of 2 large hydroelectric developments after 14 years of operation. (Apparently, Uglich and Shcherbakov are the dams being discussed). The detailed description is accompanied by tables with data on types of rock, sand and gravel used. Some damage effected by floods and storm winds is described. The drainage system is criticized and the construction of one of the earth dams is said to be faulty. Seven diagrams.

Institution : None

Submitted : No date

KUZ MISHCHEV, P. F.

124-57-1-778

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 103 (USSR)

AUTHORS: Vyazemskiy, O. V., Kuz'mishchev, P. F., Mikhalevich, P. A.

TITLE: The Operation of an Alluvial Buttress Dam in Complex Hydrogeological Conditions (Rabota namyvnoy podpornoy damby v slozhnykh gidrogeologicheskikh usloviyakh)

PERIODICAL: Izv. Vses. n.-i. in-ta gidrotekhn., 1955, Vol 54, pp 126-139

ABSTRACT: This is the conclusion of a paper bearing the same title and written by the same authors (RzhMekh, 1955, abstract 3157). Following a rise in the headwater level to 50 cm above the normal design level, observations afforded a more accurate picture of the seepage through the foundation of the dam; measures for the improvement of its operation are outlined. Various problems of the stability of the dam and various aspects of the seepage and the hydrochemical and hydrothermal comportment of the dam, as well as the mechanical piping, are examined.

V. V. Fandeyev

1. Dams--Seepage 2. Dams--Stability 3. Dams--Evaluation

Card 1/1

YEVKO, A.V., inzh.-khimik; KUZ'MISHCHEV, P.P., inzh.; MIKHALEVICH, P.A.,
inzh.; IVANOV, P.M., ~~inzh.~~, red.; VORONIN, K.P., tekhn.red.

[Hydrochemical investigations of concrete structures of upper
Volga hydroelectric power stations] Opyt gidrokhimicheskogo
issledovaniia betonnykh sooruzhenii verkhnevolzhskikh gidrouzlov.
Moskva, Gos. energ. izd-vo, 1958. 84 p. (MIRA 12:1)
(Hydraulic engineering)

14(10)

SOV/98-59-5-2/21

AUTHORS: Kuz'mishchev, P.F., and Mikhalevich, P.A., Engineers

TITLE: . Inspecting the Drainage Gallery of a Concrete Dam

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 5,
pp 7-11 (USSR)

ABSTRACT: The article gives inspection data on the drainage gallery of an unidentified concrete dam. Built in 1941, the dam was inspected at the end of 1956 with the following findings made: 1) the dam's vertical and horizontal drainage systems were in good working conditions, with no accumulation of silt or chemical overgrow; 2) the water which fills the gallery and was taken for analysis from the piezometers beneath the concrete structures proved non-aggressive to sulphite; 3) the concrete surfaces and ring-shaped bitumen keys of the drainage gallery were in good condition, with no increase in water permeability; 4) there is a considerable filtration pressure caused from time to time by the heads and the temperature

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Inspecting the Drainage Gallery of a Concrete Dam SOV/98-59-5-2/21

of the dam's structures; however, the increase in counter-pressure has a limited area and does not spread beneath both the dam's foundation plate and the lock's water intake; 5) piezometers Nr 5 and 10 showed unchanged readings despite the fact that the drainage gallery was drained during the period September-October 1956 (in 1944 - the piezometers did show lower pressure readings); 6) the most effective and simple way to lower the counter-pressure in the foundation part of the drainage channel and to make the dam more stable during the maximum-head period is temporary draining of the gallery. There are 3 diagrams, 1 table, 1 graph, and 4 Soviet references.

Card 2/2

KUZ'MISHCHEV, P.F., inzh.; MIKHAL'VICH, P.A., inzh.

Controlling seepage through joints and cracks in concrete elements
of hydraulic structures. Gidr.stroi. 30 no.8:22-28 Ag '60.
(Hydroelectric power stations) (MIRA 13:8)

VYAZEMSKIY, O.V., starshiy nauchnyy sotrudnik, kand.tekhn.nauk; MIKHALEVICH,
P.A., inzh.; KUZ'MISHCHEV, P.F., inzh.

Studying the performance of a concrete dam under complex geological
conditions. Izv.VNIIG 64:3-31 '60. (MIRA 14:5)
(Dams)

PHASE I BOOK EXPLOITATION

SOV/4513

Moscow. Tsentral'nyy institut prognozov

Voprosy dolgosrochnykh prognozov pogody (Problems in Long-Range Weather Forecasting)
Moscow, Gidrometeoizdat (Otd-niye), 1959. 60 p. (Series: Its: Trudy, vyp. 87)
950 copies printed.

Sponsoring Agencies: Tsentral'nyy institut prognozov; Glavnoye upravleniye
gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR.

Ed. (Title page): V.P. Nekrasov; Ed. (Inside book): V.I. Tarkhunova; Tech. Ed.:
T. Ya. Zamtsova.

PURPOSE: This issue of the Transactions of the Central Institute of Forecasting is
intended for scientific researchers and field workers in meteorology.

COVERAGE: The articles in the collection deal with problems in long-range (3 to 7
days) weather forecasting. Individual papers outline a method of precalculating
the mean air temperature for a natural synoptic period of January using regression
equations, and present suggestions for the application of the field of Laplacians
and temperature advection for predicting the curvature of isohypsal lines in the

Card 1/3

Problems in Long-Range Weather Forecasting

BCV/4513

tendency of the next natural synoptic period over the second natural synoptic region [Soviet Far East, Eastern and Central Siberia]. A method for the selection of analogues is proposed, and the results of the verification of T.A. Duletova's rules for forecasting upper-level cyclones are discussed. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Ped', D.A. Method of Forecasting the Air Temperature for a Natural Synoptic Period in January	3
Neshchenko, L.F., A.M. Glybovats, and L.I. Kuz'mishchaya. The Problem of Compiling the Weather Forecasts for 3-7 Days Over the Second Natural Synoptic Region	26
Gritsenko, M.V., and Yu. N. Dmitriyeva. The Problem of the Selection of Analogues	51

Card 2/3

Problems in Long-Range Weather Forecasting

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Sidchenko, T.V., and M.N. Fedulova. Results of the Verification of T.A. Diletova's Rules for Forecasting Upper-Level Cyclones and for Determining the Dates of Natural Synoptic Periods

57

AVAILABLE: Library of Congress

Card 3/3

JA/dwm/mas
12-21-60

KUZ'MISHCHEVA, L.I.

NOSHCHENKO, L.F.; OLYBOVETS, A.M.; KUZ'MISHCHEVA, L.I.

Making weather forecasts for 3-7 days in the area of the second
natural synoptic region. Trudy TSIP no.87:26-50 '59.

(MIRA 12:8)

(Weather forecasting)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928110009-1

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928110009-1"

IVANOV, Viktor Ivanovich; KUZ'MISHCHEVA, V. _

[Cuba; album] Kuba [al'bon]. Moskva, Sovetskii khudozhnik,
1961. 65 p. (MIRA 15:10)

(Cuba--Description and travel)

Organizatsiya shinnogo khozyaystva v garage (Organization of the tire economy
in the garage) Moskva, Mashiz, 1952
12 v. illus., diagrs., tables.
"Literatura": p. (101)

N/5
729.221
.K9

KUZ'MITSKAYA, K.A.; NAUMOV, V.I.; SIDOROV, G.N., inzh., retsenzent;
YESIMONTOVSKIY, M.G., inzh., retsenzent; BRONSHTEYN, Ya.I.,
kand. tekhn. nauk, dots., red.; DLUGOKANSKAYA, Ye.A., tekhn.
red.

[Organization of a tire shop in a garage] Organizatsiya shin-
nogo khoziaistva v garazhe. Moskva, Mashgiz, 1952. 102 p.
(MIRA 16:7)

(Tires, Rubber)

RODINA, A.G.; KUZ'MITSKAYA, N.K.

Abundance and distribution of bacterial plankton in Lake
Ladoga. Mikrobiologiya 32 no.2:288-295 Mr-Apr '63.

(MIRA 17:9)

1. Zoologicheskiy institut AN SSSR.

RODINA, A.G.; KUZ'MITSKAYA, N.K.

Species composition of heterotrophic micro-organisms in the water
of Lake Ladoga. Mikrobiologiya 33 no.6:1010-1017 N-D '64.
(MIRA 18:4)

1. Zoologicheskii institut AN SSSR, Leningrad.

BATYAYEVA, T.F.; KUZ'MITSKAYA, V.I.; UDOVENKO, Z.N.

Analysis of the maps of high-level baric topography (50-10 mb).
Trudy TSIP no.137:101-122 '64. (MIRA 17:9)

SOV/51-6-2-23/39

AUTHORS: Budrite, S.D., Kuzmitskita, L.L. and Shugurov, V.K.

TITLE: The Improved Analytical One-Electron Wave-Functions (Utochnennyye analiticheskiye odnoelektronnyye volnovyye funktsii)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 2, pp 245-247 (USSR)

ABSTRACT: The present paper shows how to find analytical functions which would give the same or nearly the same results as one-electron functions which are solutions in Fok's self-consistent field (Ref 1). The authors write down Fok's equations in the momentum space and solve them by successive approximations. They start with hydrogen functions. Since the hydrogen-functions (Ref 2) are very close to Fok's one-electron functions, it is sufficient to use the first approximation. The functions then obtained for various terms differ, in general, both in their parameters and their analytic form. The parameters are found from the condition of energy minimum. The authors follow this procedure to calculate wave-functions for helium-type atoms in their ground state. The results of their calculations are given in a table on p 247 where, for the sake of comparison, Morse's and Fok's functions (the latter obtained by Tsyunaytis et al., Ref 4) are also given. The table lists

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SOV/51-6-2-23/39

The Improved Analytical One-Electron Wave-Functions

all these wave-functions for He , Li^+ , Be^{++} and B^{+++} all of which are in the $1s^2$ configuration. Acknowledgments are made to Prof. A.P. Yutsis for his advice. There are 1 table and 4 references, 1 of which is Soviet, 1 German, 1 English and 1 mixed (German and English).

SUBMITTED: July 7, 1958

Card 2/2

GLEMBOTSKIY, I.I. [Glembockis, J.]; KUZMITSKITE, L.L. [Kuzmickyte, L.]

Approximate single-electricwave functions for the excitation levels
of the positive ion of oxygen. Liet ak darbai B no.1:87-98 '60.

(EEAI 9:10)

1. Institut fiziki i matematiki AN Litovskoy SSR.
(Oxygen) (Ions) (Eigenfunctions)

KUZ'MITSKIY, A. (Leningrad)

Sled rake. IUn.tekh. 4 no.11:27 N '59.
(Harvesting machinery)

(MIRA 13:4)

KUZ'ITSKIY, B., inzhener-kapitan 3-go ranga

For rapid replacement of electric fuses. Starsh.-serzh. no.3:23
Mr '62. (MIRA 15:4)

(Submarine boats)

KUZ'NITSKIY, B.B., aspirant

Pharmacology of a biological serotonin precursor, 5-hydroxy-tryptophan. . Zdrav. Bel. 9 no.8:47-50 Ag'63 (MIRA 17:3)

1. Iz kafedry farmakologii (zav. - prof. K.S. Shadurskiy)
Minskogo meditsinskogo instituta.

PIUNOVSKIY, I.I.; KUZ'MITSKIY, N.D.

Crops preceding for winter rye. Zemledelie 26 no.8:66 Ag '64.
(MIRA 17:11)

L 39721-66 EWT(1)/EWA(h) GD-2

ACC NR: AP6007596

SOURCE CODE: UR/0119/66/000/002/0023/0024

AUTHOR: Vender, B. M. (Engineer); Kuz'mitskiy, V. A.; Lukin, O. P.

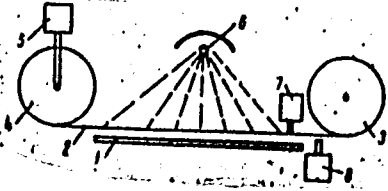
ORG: none

TITLE: Small-size rear-lighted punch-type recorder 25

SOURCE: Priborostroyeniye, no. 2, 1966, 23-24

TOPIC TAGS: data recording, signal recording, electronic equipment

ABSTRACT: A step-advancing paper-strip device is suggested for recording various control signals, such as those checking operable conditions of equipment, etc. A coordinate raster is printed on the face of transparent screen 1 (see figure); 10-cm wide paper (or metal) strip 2 is stepwise advanced by reels 3 and 4 driven by motor 5. Lamp 6 illuminates the strip where puncher 7 makes holes at definite time moments in (vertical) positions corresponding to the monitored circuits or their conditions. Small printer 8 may supply additional information at the time of punching. The recorder with 5-min steps is proposed for signaling electronic equipment faults, etc. Orig. art.



has: 5 figures.

SUB CODE: 09 / SUBM DATE: none
Card 1/1 *HL*

UDC: 621.087.352

SENZYUK, K.D.; BERLIN, S.S.; ASNER, B.G. [Asner, B.H.]; KUZ'MITSKIY, V.M.
[Kuz'myts'kyi, V.M.]; ARSENT'YEV, Ye.D. [Arsent'iev, IE.D.];
SHIMANSKAYA, G.G. [Shymans'ka, H.H.]; PINSKIY, A.Ye. [Pyns'kyi, A.IE.];
KHOMENKO, A.I.; GAMPEL', A.O. [Hampel', A.O.]

Proposals of efficiency promoters. Leh.prom. no.4:46-52 O-D
'62. (MIRA 16:5)

(Kiev--Knit goods industry--Technological innovations)
(Odessa--Knit goods industry--Technological innovations)
(Kiev--Cotton manufacture--Technological innovations)

KUZ'MOV, Nikolay Terent'yevich, inzh.; ALEKSEYEV, G.P., inzh., red.;
BUSHUYEV, N.M., kand.tekhn.nauk, red.; GUTMAN, I.M., inzh., red.;
KALENICHENKO, P.T., inzh., red.; IGNAT'YEV, M.G., agronom, red.;
PICHAK, F.I., kand.tekhn.nauk, red.; POLKANOV, I.P., kand.tekhn.
nauk, red.; DUGINA, N.A., tekhn.red.

[Efficient use of machinery in harvesting by separate stages]
Ratsional'noe ispol'zovanie mashin na razdel'noi uborkе. Moskva,
Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1959. 101 p.
(MIRA 13:5)

(Harvesting machinery)

KUZ'MOV, Nikolay Terent'yevich; IGNAT'YEV, Mikhail Gerasimovich;
KALENICHENKO, P.T., inzh., retsenzent; MAKAROV, M.P., inzh.,
retsenzent; BUSHUYEV, N.M., kand.tekhn.nauk, red.; DUGINA,
N.A., tekhn.red.

[Mechanisation of livestock farms; manual for collective-farm
workers] Mekhanizatsiya zhivotnovodcheskikh ferm; spravochnik
kolkhoznogo rabotnika. Moskva, Gos.nauchno-tekhn.izd-vo mashi-
nostroit.lit-ry, 1960. 207 p. (MIRA 13:12)
(Farm mechanization)
(Stock and stockbreeding)

PLAKSIN, V.N.; PRITS, V.L.[deceased]; KUZ'MOV, N.T., inzh., red.

[Machines for the preparation and placement of fertilizers]
Mashiny dlia zagotovki i vneseniia udobrenii. Moskva, Mash-
giz, 1963. 97 p. (MIRA 17:4)

LENSKIY, S.M.; KUZ'MOV, P.N.; KAUFMAN, V.P., redaktor; VASILEVSKIY, Ya.B.,
tekhnicheskiiy redaktor.

[Planning the construction of oil and gas wells] Planirovanie stroi-
tel'stva neftianyykh i gazovykh skvazhin. Baku, Gos. nauchno-tekhn.
izd-vo neftianoi i gorno-toplivnoi lit-ry, Azerbaidzhanskoe otделение,
1951. 55 p. (MIRA 8:4)
(Oil well drilling)

MATVEYEV, V.I.; GOL'DBERG, M.G.; KUZ'MOV, P.M., redaktor; GONCHAROV,
I.A., tekhnicheskii redaktor. ~~redaktor~~

[Innovators in the petroleum industry of Azerbaijan] Novatory
neftianyykh promyslov Azerbaidzhana. Baku, Gos.nauchno-tekhn.
izd-vo neftianoi i gorno-toplivnoi lit-ry, Azerbaidzhanskoe
otd-nie, 1954. 68 p. (MLRA 8:11)
(Azerbaijan--Oil well drilling)

KAUFMAN, V.P.; KUZMOV, P.H.

Increase labor productivity in petroleum production and refining.
Azerb. neft. khoz. 37 no.3:46-48 Mr '58. (MIRA 11:8)
(Azerbaijan—Petroleum industry)

KAUFMAN, V.P.; KUZ'MOV, P.N.

Cost of oil and gas production in Azerbaijan. Neft.khoz. 37
no.2:14-18 F '59. (MIRA 12:4)
(Azerbaijan--Oil fields--Production methods--Costs)
(Azerbaijan--Gas, Natural--Costs)

KAUFMAN, V.P.; KUZ'MOV, P.N.

Increasing the efficiency of geological prospecting. Geol. nefiti i
gaza 5 no.11:14-17 N '61. (MIRA 14:11)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche
nefti.

(Azerbaijan--Boring)

KUZ'MOV, V.A., inzh.

Reducing excess rock removal during shaft sinking. Shakht.
stroil. no.1:25-26 Ja '60. (MIRA 13:5)

1. Krivorozhskiy filial Ukrainskogo nauchno-issledovatel'skogo
instituta organizatsii i mekhanizatsii shakhtnogo stroitel'stva.
(Shaft sinking)

KUZ'MOV, V.A.

Response to the article by G.V. Golovskaya "Deciding on the dimensions of blast holes." Gor. zhur. no.5:80 My '60 (MIRA 14:3)

1. Shakhta Tsentral'naya rudoupravleniya imeni XI parts'yezda, Krivoy Rog.
(Blasting) (Golovskaya, G.V.)

5(2)

SOV/21-59-1-15/26

AUTHORS: Delimarskiy, Yu. K., Member of the AS UkrSSR, and
Kuz'movich, V.V.

TITLE : A Polarographic Investigation of Chlorides of Heavy
Metals Dissolved in a Molten NaCl-KCl Mixture (Poly-
arograficheskoye issledovaniye khloridov tyazhëlykh
metallov, rastvorenykh v rasplavlennoy smesi NaCl-
KCl)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1959, Nr 1,
pp 55-59 (USSR)

ABSTRACT: The subject polarographic investigation was conducted
on molten solutions of CuCl , CuCl_2 , AgCl , ZnCl_2 ,
 CdCl_2 , TlCl , PbCl_2 , CoCl_2 and NiCl_2 in a NaCl-KCl
mixture. A direct proportionality² between the diffu-
sion current intensity and the molar fraction of the
dissolved chloride was shown. The polarographic
waves obtained on solid Pt-electrodes were found to
be satisfactorily determined by the Heyrovsky-Ilkovic

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SOV/21-59-1-15/26

A Polarographic Investigation of Chlorides of Heavy Metals Dissolved in a Molten NaCl-KCl Mixture.

equation, and not by the Kolthoff-Lingane equation of concentration polarization. In particular, the dependence of the half-wave potential on the logarithm of the molar fraction was not expressed by a straight line. The half-wave potential values were found to remain nearly constant, and the prelogarithmic coefficient values of the Heyrovsky-Ilkovic equation did not always correspond to the valency of simple ions of the respective salts. The determined dependence of the diffusion currents on the temperature made possible the calculation of the corresponding activation energies, and these energies demonstrated that the increase of diffusion currents with the temperature, is not caused by the decrease of viscosity alone. There are 3 graphs, 2 tables and 3 references, 2 of which are Soviet and 1 English.

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SOV/21-59-1-15/26

A Polarographic Investigation of Chlorides of Heavy Metals Dissolved in a Molten NaCl-KCl Mixture.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR
(Institute of General and Inorganic Chemistry of
AS UkrSSR)

PRESENTED: October 27, 1958.

Card 3/3

KUZ'MOVICH, V.V.

Polarographic study of iron and tin chlorides in a fixed mixture of sodium and potassium chlorides [with summary in English].
Dop.AN URSR no.3:344-348 '61. (MIRA 14:3)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR Yu.K.Delima'skim [Delima's'kiy, IU.K.].
(Polarography) (Iron chloride) (Tin chloride)

30871

S/073/61/027/006/003/005
B110/B147

5. 4700

AUTHORS: Sheyko, I. N., Gorodyskiy, A. V., Kuz'movich, V. V.

TITLE: Polarography of molten systems containing zirconium compounds

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 27, no. 6, 1961, 767 -- 770

TEXT: Molten Zr compounds were studied polarographically to obtain some data on the electrolytic deposition of Zr from melts. An automatic polarograph with solid stationary electrodes with depolarization of the electrodes between the exposures by short-circuiting was used. A 5 m long and 0.5 mm thick Pt wire served as cathode while a 2500 mm² Pt disk was taken as anode. The melt was in a porcelain crucible in a quartz test tube in an Ar atmosphere. Molten systems of K₂ZrF₆, ZrCl₄, and ZrO₂ were investigated, molten equimolar mixture of KCl and NaCl being used as a background. Two waves were found in the polarogram of K₂ZrF₆ with 2-5 mole% concentration, which indicate the presence of transformation products of electrolytic dissociation of K₂ZrF₆. $xK^+ + (F^-)_x$. $ZrF_4 \rightleftharpoons (KF)_x$. ZrF₄

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S/073/61/027/006/003/005

B110/B147

Polarography of molten systems...

$\frac{1}{2}(KF)_x \cdot ZrF_y^{(4-y)+} + (4-y)F^-$, where $(y = 0 + 4)$. Small amounts of a transformed form (TF) of K_2ZrF_6 cause the occurrence of waves in the polarograms of pure K_2ZrF_6 and react on the electrode at lower voltages. Discharge of TF can only be effected by low current densities. An additional increase of voltage causes separation of alkali metal or Zr, or reduction of the original form (OF) of K_2ZrF_6 to Zr metal. It was possible to observe OF waves on a background of alkali metal when polarographing dilute K_2ZrF_6 melts (0.1%). Presumably, the maxima of the two waves of the OF polarograms are caused by variation of the active electrode surface. Since both OF waves have the same height, reduction to Zr metal probably takes place according to "4-2-0" (two successive processes) or according to "4-2, 4-0" (two parallel processes). For the systems $KCl \cdot NaCl - ZrCl_4$, $KCl \cdot NaCl - ZrO_2$, $KCl \cdot NaCl \cdot NaF - ZrO_2$ the electrodic processes were only estimated approximately. As $ZrCl_4$ possesses a considerable vapor tension at melting temperature, its 30% solution was used

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30871

S/073/61/027/006/003/005
B110/B147

Polarography of molten systems...

in the molten mixture of KCl and NaCl. Only the first wave of the many waves of the polarograms could be recognized distinctly, and it was already produced at a very low voltage. ZrO_2 was investigated as saturated solution in the melt on the background of KCl·NaCl and KCl·NaCl·NaF. No waves were observed in the polarogram of ZrO_2 on chloride background, the polarogram, however, took a steeper course than that of the background. Addition of NaF resulted in waves, which proves the formation of compounds of TiO_2 with fluorides, which are conducting and soluble in the melt; these compounds can be reduced on the cathode. There are 4 figures and 4 Soviet references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR
(Institute of General and Inorganic Chemistry AS UkrSSR)

SUBMITTED: March 16, 1959

Card 3/3

KUZ'MOVICH, V.V.

Reversibility criteria of electrode reactions and the equations
of polarographic curves for fused salts. Dop. AN URSR no. 4:
509-513 '62. (MIRA 15:5)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
Predstavleno akademikom AN USSR Yu.K. Delimarskim [Delimars'kyi,
IU.K.].

(Salts) (Electromotive force) (Polarography)

was also. The study was conducted in a hospital setting and the results were as follows:

1. The first part of the document is a list of the names of the individuals who were involved in the project. The names are listed in alphabetical order. The names are: [illegible]

2. The second part of the document is a list of the names of the individuals who were involved in the project. The names are listed in alphabetical order. The names are: [illegible]

DELIMARSKIY, Yu.K.; KUZ'MOVICH, V.V.

Use of a dropping bismuth electrode in polarography of fused
salts at high temperatures. Zhur.prikl.khim. 37 no.7:1490-
1494 J1 '64. (MIRA 18:4)

KUDRYASHOV, Ye.V.; FINKEL'SHTEYN, Sh.D.; KUZ'MUK, L.G.

Kichik-Bel', a new oil field in Tajikistan. Neftgaz. geol. o
geofiz. no.8:11-13 '63. (MIRA 17:3)

1. Sredneaziatskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta prirodnogo gaza i Tadzhikskoye geologicheskoye upravleniye.

28(1)

AUTHORS: Karnyushin, L.V., Candidate of Technical Sciences, Docent,
and Kuz'myak, B.D., Engineer

SOV/143-59-5-7/19

TITLE: The L'vov Polytechnic Institute Laboratory of Auto-
mated Electric Drives

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Energetika,
1959, Nr 5, pp 56-68 (USSR)

ABSTRACT: From 1924 to 1929 the first electrical drive laboratory
in the USSR was organized by Professor S.S. Rinkevich
at the Leningradskiy elektrotekhnicheskiy institut
imeni V.I. Ul'yanova (Lenin) (Leningrad Electrical
Engineering Institute imeni V.I. Ul'yanov (Lenin)).
Thereafter, electric drive laboratories were organized
at the Moskovskiy energeticheskiy institut (Moscow In-
stitute of Power Engineering), at the Leningradskiy
politekhnicheskiy institut (Leningrad Polytechnical
Institute), at the Kharkovskiy elektrotekhnicheskiy
institut (Khar'kov Electrical Engineering Institute),
and at large institutes and technological colleges of
the USSR. Presently, only in polytechnic power engi-

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neering and electric engineering colleges of the USSR, there are more than 25 laboratories of automated electric drives, not counting similar laboratories in agricultural, mining, and other higher educational institutions. However, only a few of them correspond by equipment and organization to the development level of modern industrial automated electrical drives. In this paper the authors describe the experience of creating a new laboratory of automated electric drives at the L'vovskiy politekhnicheskii institut (L'vov Polytechnic Institute) which was activated in 1957, instead of a temporary laboratory built in 1948. The laboratory at the L'vov Polytechnic Institute was built according to a project developed by Candidate of Technical Sciences, Docent, L.V. Karnyushin. The temporary laboratory was created under the guidance of Doctor of Technical Sciences, Professor V.N. Kiyanits. After explaining principles of efficient laboratory organization, the authors present a detailed

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description of the laboratory. The laboratory is housed in an L-shaped building. The main wing is 22.5 x 13.5 x 4.7 m and has a glass roof. The other wing is 17.2 x 8.4 m and is used for conducting laboratory work on industrial electronics and electrical control equipment. One section of the last mentioned building section serves as a workshop. The total floor space of the laboratory is 300 m². About 60 different types of laboratory work may be conducted at 20 work places. Between 12 and 16 different types of laboratory work may be conducted simultaneously. The authors further describe the power equipment and the power mains, equipment of work places and the organization of laboratory work, including work safety. They present in Figure 3 a circuit diagram of the power distribution system in the laboratory. Figures 6, 8 and 9 are photographs of student's work places. At the laboratory, the students work in groups for which 6 to 8 work places are assigned. The time allocated

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